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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named  
Inventor : Dean M. Wierman et al.

Appln. No. : 10/643,370

Filed : August 19, 2003

For : METHOD AND NOISE REDUCTION  
USING INSTANTANEOUS SIGNAL-  
TO-NOISE RATION AS THE  
PRINCIPAL QUANTITY FOR  
OPTIMAL ESTIMATION

Docket No.: M61.12-0522

Group Art Unit: 2621

Examiner:

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I HEREBY CERTIFY THAT THIS PAPER IS BEING  
SENT BY U.S. MAIL, FIRST CLASS, TO THE  
COMMISSIONER FOR PATENTS, P.O. BOX 1450,  
ALEXANDRIA, VA 22313-1450, THIS

18<sup>th</sup> DAY OF January, 20 05.  
  
PATENT ATTORNEY

Sir:

The patents or publications listed on the enclosed PTO Form-1449 are submitted pursuant to 37 C.F.R. § 1.97. Copies of the patents or publications cited are enclosed, except as waived by the Official Gazette notice of August 5, 2003 regarding copies of U.S. Patents and Published Applications.

**TIME OF FILING**

The information disclosure statement is being filed:

1.   x   with the application or within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. In accordance with 37 C.F.R. § 1.97(b), no statement or fee is required.
2.        after the time period specified in paragraph 1 above, but before the mailing date of a final action under 37 C.F.R. § 1.113 or notice of allowance under 37 C.F.R.

§ 1.311. Therefore, in accordance with 37 C.F.R. § 1.97(c), submitted herewith is:

(check either A or B below)

- A. \_\_\_ a statement as specified in 37 C.F.R. § 1.97(e).
- B. \_\_\_ the fee set forth in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c).

3. \_\_\_ after the mailing date of either a final action under 37 C.F.R. § 1.113 or a notice of allowance under 37 C.F.R. § 1.311, whichever occurs first, but before payment of the issue fee. Therefore, Applicant petitions for consideration and submits herewith:

- A. a statement as specified in 37 C.F.R. § 1.97(e);
- B. the petition fee set forth in 37 C.F.R. § 1.17(p).

#### STATEMENT

(only used if No. 2(A) or No. 3 above is checked)

The person(s) signing below certify

(check appropriate paragraph)

\_\_\_ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. § 1.97(e)(1).

OR

\_\_\_ that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. § 1.97(e)(2).

**METHOD OF PAYMENT**

  x   No fee is required.

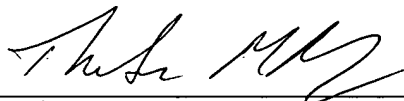
       Attached is a check in the amount of \$       .

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123. A duplicate copy of this communication is enclosed.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By:



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TMM:sew

FORM PTO-1449	Atty. Docket No.: M61.12-0552	Appl. No.: 10/643,370
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	First Named Inventor:	
	Dean M. Wierman et al.	
	Filing Date	Group Art:
	August 19, 2003	2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AL	B. Frey, L. Deng, A. Acerò, and T. Kristjansson, "ALGONQUIN: Iterating Laplace's method to remove multiple types of acoustic distortion for robust speech recognition," in <i>Proc. 2001 Eurospeech</i> , Aalborg, Denmark, September 2001.
AM	J. Droppo, A. Acero, and L. Deng, "A nonlinear observation model for removing noise from corrupted speech log Mel-spectral energies," in <i>Proc. ICSLP</i> , Denver, CO, Sept. 2002, pp 182-5.
AN	H.G. Hirsch and D. Pearce, "The AURORA experimental framework for the performance evaluations of speech recognition system under noisy conditions," in <i>ISCA ITRW ASR2000 "Automatic Speech Recognition?" Challenges for the Next Millennium</i> , Paris, France, September 2000.
AO	T. Kristjansson, B. Frey, and L. Deng, "Joint estimation of noise and channel distortion in a generalized EM framework," in <i>Proc. ASRU 2001</i> , Madonna di Campiglio, Italy, Dec. 2001.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.